

Ethnobotanical studies on Notchimalai village, Thiruvannamalai district, Tamil Nadu

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ABSTRACT

During the years 2009-2010 several field trips were conducted to document the ethnomedicinal remedies for various diseases with 100 plant species mentioned by the village people community resides at Notchimalai, Thiruvannamalai dt., Tamil nadu, India, who were traditionally using herbs from the childhood periods onwards. The plants were deposited as herbarium specimens in Department of Botany, Government Arts College, Tiruvannamalai. The value of medicinal plants to the mankind is very well proven. It is estimated that 70 to 80 per cent of the world population rely chiefly on traditional health care system and largely on herbal medicines (Shanley and Luz, 2003). Only 15 per cent of pharmaceutical drugs are consumed in developing countries (Toledo, 1995). The affluent people have little alternative to herbal medicine, and they depend on traditional health care system (Marshall, 1998).

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Key words : Traditional uses, Medicinal plants

INTRODUCTION

Some tribes are adhering to traditional way of life, native culture and customs, the tribal have vast store of information and knowledge on potentially useful medicinal plants. The traditional knowledge system in India is fast eroding due to steady decline in human expertise capable of recognizing various medicinal plants. Much of this wealth of knowledge is totally becoming lost as traditional culture is gradually disappearing because it is mostly oral (Hamilton, 1995). Therefore, effort should be initiated for

the documentation and computerization of useful medicinal plants and their traditional knowledge (Mehrotra and Mehrotra, 2005).

From the ethnomedicinal point of view Notchimalai village, Thiruvannamalai district remained unexplored and no comprehensive account particularly on folklore of this region is available. Banerjee (1977) published a note on ethnobotanical observations of Araku valley. Rao *et al.*, (2001) reported 160 medicinal plants that occur in the same region. There is urgent, immense need to inventories and record all ethnomedicinal information among the diverse ethnic communities before the traditional cultures are completely lost (Rama Rao and Henry, 1996). Ethnomedicinal activities on different aspects in Indian sub-continent has been put forth by Jain (1981). Therefore, continuous efforts should be made to collect this information which will provide avenues for future generation. It is thus paramount importance that the native plant genetic wealth need to be maintained for posterity.

All the more, several wild medicinal plants are fast disappearing due to the destruction of forest by inhabitants, invasion of exotic flora and introduction of new crops. Hence, there is an urgent need for exploration and

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documentation of this traditional knowledge in order to ascertain the conservation value of the local ethnomedicinal plants of the forests. Therefore, the present study is an attempt to present some interesting ethnomedicinal observations recorded in Notchimalai, Thiruvannamalai dt., Tamil nadu, India.

Study area:

Notchimalai with an area of 130 acres of the Thiruvannamalai district of Tamil nadu. It lies between 11°55 and 13°15 North of Latitude and between 78°20 and 79°50 East of Longitude.

MATERIALS AND METHODS

Exploration and survey work among the village peoples of Notchimalai were conducted in all the inhabited areas along the margin of Notchimalai during full year of 2010. Efforts have been made to collect the medicinal plants which were in flowering and fruiting conditions and were identified with the help of local floras. During the course of survey, first hand information on the medicinal uses of the plants was gathered from local people and vaidyas. The uses of plants particularly for medicinal, were confirmed by many cross checking as possible in different localities.

Collection of information:

The information on folk medicinal uses of plants was obtained through direct filed interviews with traditional healers. The data regarding names of plants, parts used and their method of preparation and mode of administration of various remedies were also noted down. When recording the names of plants, forest visit was made with the informant for identification of the specific plants. The inventory involved collection of plant specimens and then interviewing informants for vernacular names and uses.

Identification:

The plant materials were identified with the help of standard local floras, preliminary identification was done by examining fresh plants procured from the forest with the help of tribal. Few respondents were more informative and co-operative; they have shown fresh plants in the habitat, which was useful for the final identification. The identification of plant materials was confirmed at the herbarium in the Botany department of Andhra University.

Preservation:

The collected materials were preserved in air tight

containers and labeled individually. Various medicinal plant parts collected were broadly categorized as leaves, stem, bark, root, flower, fruit, seed, rhizome, bulb etc.

RESULTS AND DISCUSSION

In the present study 100 species of plants included in 81 genera and 40 families have been recorded which are being potentially exploited by the tribal groups in curing different human ailments as shown in Table 1. Out of these 40 families, Amaranthaceae and Fabaceae were found to be dominant ethnomedicinally with 7 species used in various ailments, followed by Euphorbiaceae, Lamiaceae, Solanaceae, Malvaceae, Rutaceae, Asteraceae, Cucurbitaceae, Liliaceae, Apocynaceae, Acanthaceae, Caesalpiniaceae, Meliaceae, Asclepiadaceae, Convolvulaceae, Vitaceae, Mimosaceae, Verbinaceae, Annonaceae, Myrtaceae, Moraceae, Polygalaceae, Sapotaceae, Phyllanthaceae, Basellaceae, Nyctanginaceae, Rubiaceae, Sapindaceae, Passifloraceae, Apiaceae, Gingeraceae, Poaceae, Scrophularaceae, Papilionaceae, Loganiaceae and Gentianaceae.

Among the 100 plant species that were recorded include trees 24, followed by shrubs 15, herbs 49 and climbers 12 as shown in the Table 1. The traditional Vydhyas administer medicine by way of oral decoction, poultice and plant parts as paste.

For the preparation of the traditional medicine, these tribal Vydhyas used different parts of the plant species. Depending upon the plant part used leaf constitutes the highest percentage of utilization *i.e.*, 32 per cent and gum the lowest 1 per cent, while others being in between these two. Root is used in the quantum of 23 per cent in curing ailments follower by stem bark 17 per cent, fruit 9 per cent, seed 7 per cent, latex 4 per cent, root bark 3 per cent, whole plant and flower 2 per cent.

In the present investigation 100 plant species used by farmers of Notchimalai, Thiruvannamalai district for different ailments and posterity have been identified. Forty seven different ailments/diseases are being treated by these plant species (Table 1). The Vaidhyas communities residing here have a wide range of remedies for asthma, body pains, bone fractures, cold, cough, cuts and wounds, dysentery, diarrhoea, eczema, gastric ulcers, night blindness, skin troubles, stomach ache, syphilis etc.

From the enumeration it is clear that Vaidhyas of the Notchimalai village still depend, partially, on nature for their livelihood. No doubt civilization has touched almost all villages, but for economic backwardness they depend on forest for food, fuel, other requirements and an important

Table 1: Reported information on ethnomedicinal plants used by villagers from Notchimalai, Thiruvannamalai, Tamil Nadu, India

Sr. No	Botanical name	Family	Local name	Parts used, mode of preparation ethanomedicinal uses and some other used as ingredients
1.	<i>Abrus precatorius</i> L.	Fabaceae	Kundumani/ kunrimani	The dried seed is powered and applied as an external application of oedema and also used for joint pain, cramps, muscular catch, numbness of the foot and arthritic pains.
2.	<i>Abutilon indicum</i> (L.) sweet	Malvaceae	Thuthi	Roots used for fever. Seeds are emollient and diuretic. Infusion of leaves cures constipation, venereal heat and irritation in anus. Leaves roasted in castor oil is applied to cure piles, fistula and anus irritation.
3.	<i>Acacia arabica</i> L.	Fabaceae	karuvelum	Tender leaves are useful for eye diseases, an ideal anti-dote for poisons if taken internally.
4.	<i>Acacia concinna</i> willd.	Mimosaceae	shikai	Tender leaves are used for jaundice.
5.	<i>Acalypha idica</i> L.	Euphorbiaceae	Kuppaimeni	Leaves used for bedsores and wounds
6.	<i>Achras sapota</i> L.	Sapotaceae	Sapota	Fruit is edible, its used to treat for excess urine flow, anorexia, arthritis and nodular rheumatism.
7..	<i>Achyranthes aspra</i> L.	Amaranthaceae	Naayuruvi	Flowering spikes or seeds are used as an external application for poisonous insect bites.
8.	<i>Acorus calamus</i> L.	Araceae	Aararoot	Rhizome is used in the cure of host of diseases such as epilepsy, mental ailments, chronic diarrhoea and dysentery. It is used in incense sticks for lice, bedbugs, worms,
9.	<i>Adhathoda vasica</i> L.	Acanthaceae	Adathodai	Leprosy, blood disorders, heart troubles, thirst, asthma, fever, vomiting, loss of memory, leucoderma, jaundice, tumors, mouth troubles, sore-eye and gonorrhoea.
10.	<i>Aegle marmelos</i> (L.) correa Ex, schultz	Rutaceae	Vilvum	Unripe fruit used for stomach indigestion and Tonic for heart and brain.
11.	<i>Sesbania grandiflora</i> (L.) Poiret	Fabaceae	Agati	Leaves are rich in vitamin A, C, and D along with calcium. Leaves are used in medicinal preparation. It is used for ulcers, skin eruptions, digestive and nervous disturbances.
12.	<i>Ageratum Conyzoides</i> (L.)	Asteraceae	Mookuthi poo	Juice of leaf along with the leaves of <i>Cocculus hirsutus</i> is taken to cure diarrhoea.
13.	<i>Aloe vera</i> (L) Burm.f.	Liliaceae	Kattalai	Entire plant. Purgative anthelmintic, piles
14.	<i>Aloe indica</i> (L.)	Liliaceae	Sotrukathalai	Plant is used to treat rheumatism, phlegmatic diseases, worm infections, leprosy, piles, psychic disorders and dyspepsia.
15.	<i>Allium sativum</i> L.	Liliaceae	Garlic	Bulbs used for condiments and good for health. The juice of the bulb is used as ear drop for clearing hearing. Juice if applied in the throat it cures cough and expels the intestinal worms.
16.	<i>Alternanthera sessilis</i> (L) R Br.ex DC	Amaranthaceae	Ponaangkanni	This plant is an ideal remedy for all the ophthalmic disorders. It cures liver disorders, stomatitis and bad breath. To cure eye disorders this leaf is consumed regularly along with butter.
17.	<i>Amaranthus gangeticus</i> L.	Amaranthaceae	Serukeerai	Plant is rich in minerals and other vitamin. If consumed daily along with food it reduces iron deficiency. Effective in tuberculosis and phlegmatic diseases and also effective in arthritis, liver disorders and urinary infection.
18.	<i>Amaranthus paniculatus</i> L.	Amaranthaceae	Mulaikeerai	Leaves and tender shoots are used as vegetables. It is used for purifying the blood, beneficial in piles and strangury, its acts as diuretic.

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19.	<i>Amaranthus polygamus</i> L.	Amaranthaceae	Pannaikeerai	Leaves and young shoots are used as greens in food. It cures indigestion, ulcer, eczema syphilitic, sores and intestinal ulcers. This plant helps for the digestion.
20.	<i>Amaranthus tristis</i> L.	Amaranthaceae	Arukeerai	Plant cooked and taken regularly it relieves temperature. Phlegmatic diseases, arthritis. If consumed with toordhall and pepper, it relieves cough and reduce temperature.
21.	<i>Amaranthus viridis</i> L.	Amaranthaceae	Kuppai keerai	Plant has many medicinal properties ,vitamins, minerals and calcium. It is a good appetizer, increases the body heat and acts as diuretic. The paste of the plant used as an external application for oedema and boils.
22.	<i>Anisochilus carnosus</i> Wall.	Lamiaceae	Karpuravalli	Fresh juice of the leaves mixed with sugar candy are given to children in cough. It increases sweating and useful in treating cold and phlegmatic diseases of the children.
23.	<i>Annona reticulate</i> L.	Annonaceae	Ramaseetha	Unripened fruit stops dysentery and diarrhea. Powdered seed ,if applied in the skin ulcers, clean the ulcers and help for faster healing. Powdered seed if taken in recommended doses aborts pregnancy.
24.	<i>Annona squamata</i> L.	Annonaceae	Custard apple	Leaves, barks, seeds and unripe fruits are used in medicinal preparations and used for destroying insects and lice on cattle. Leaf juice used as a nasal drops cures unconsciousness.
25.	<i>Arachis hypogaea</i> L.	Fabaceae	Mallattai	Boiled seeds if consumed with jaggery it improves the health and vitality. Oil extracted from the seed it used in cooking. Oil of this seed with milk cures urinary bladder problems and act as diuretic.
26.	<i>Asparagus racemosus</i> Willd.	Liliaceae	Thanneervittankilangu	Leaves boiled and mixed with ghee are applied externally to relieve suppuration in boils and tumors. Roots boiled in oil is used in cutaneous affections. The infusion of the roots prevents confluency of small pox.s
27.	<i>Atropa belladonna</i> L.	Solanaceae	Deadly Night shade	Leaves and roots are used to relieving muscular pain
28.	<i>Averrhoa acida</i> L.	Oxalidaceae	Arunelli	Decoction of the leaves is a good diaphoretic. Leaves are mucilaginous and gonorrhoe. Ripe fruits are edible and used as adjunct to cough.
29.	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Vembu	Part of the Neem tree can be used as a spermicide. Neem oil is used for preparing cosmetics (soap, shampoo, balms and creams, for example Margo soap), and is useful for skin care such as <u>acne</u> treatment, and keeping skin elasticity. Neem oil has been found to be an effective mosquito repellent.
30.	<i>Basella rubra</i> Roxburgh	Basellaceae	Pasalai	Plant reduces thirstiness and removes constipation in pregnant ladies. Leaves are soaked in water, the water become viscous it used as an application on the head and the forehead which induces sleep. Tender leaves and stem taken raw.
31.	<i>Bergera koengi</i> (L.) Sprengelw	Rutaceae	Kariveppilai	Green tender leaves are eaten raw for cure of dysentery. Infusion of the root bark or the leaves is useful in vomiting. Leaves are used for flavouring curries and condiments. It is a good appetizer.

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32.	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Mookarattai keerye	Leaves if consumed along with food cures constipation, jaundice, cold and rheumatism. Infusion of the root if consumed cures rheumatoid arthritis, jaundice, anuria, ascites, anaemia, chest congestion, inflammation of the spleen and disorders of the testicles.
33.	<i>Borreria ocymoides</i> DC	Rubiaceae	Kodi – amman paccharisi	Juice of leaf is mixed with the leaves of <i>Garcinia pictorial</i> and stem bark of <i>Syzigium cumini</i> and heated with the gingelly oil to prepare a paste and applied on affected places to cure wounds.
34.	<i>Calotropis procera</i> W.T. Aiton	Asclepiadaceae	Vellaierrukkan	For snake bites, the milk of this plant is very effective.
35.	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Mudakkathankeerai	Leaves are used to cures joint pains, herpes, eczema and rheumatism. Roasted leaves are squeezed and the juice used as ear drops, checks otorrhoea and also used to treat inflammation of the testicles.
36.	<i>Carica papaya</i> L. .	Passifloraceae	Pappaali	Leaves soaked in hot water, it used as an external application for nervous debility and neurotic. Leaves used externally to cure ulcers. Fruit is an excellent vermicide. This improves digestive power and acts as laxative.
37.	<i>Cassia angustifolia</i> Mill.	Caesalpinaceae	Nilaavarai	Decoction of the leaves is very effective in cases of dyspepsia, flatulency, fissure of the anus, and constipation.
38.	<i>Cassia auriculata</i> L.	Caesalpinaceae	Aavarai	Plant is used in the form of powder mixed with honey or the decoction especially of flower buds is administered in chyluria and diabetes for excellent results. Leaves are used as substitute for tea. Seeds are powdered and blown into eyes.
39.	<i>Cayratia pedata</i> Juss Ex. Gagnepain	Vitaceae	Siru Valli kodi	Powder of leaf, fruit and stem is taken with the leaves of <i>Ocimum basilicum</i> , rhizome of <i>Alpinia calcarata</i> and <i>wiwithania somnifera</i> to get relief from gastric complaints.
40.	<i>Cipadessa baccifera</i> (Roth) Miq	Meliaceae	Maramalli	Decoction of leaves is taken with the leaves of <i>Tragia involucrata</i> and <i>Aristolochia talaga</i> to cure scorpion insect and snake bites.
41.	<i>Cissus quadrangularis</i> L.	Vitaceae	Pirandai	It is a tonic and analgesic, and prescribes its use to help heal broken bones, thus its name <i>asthisamharaka</i> (that which prevents the destruction of bones). And also been used to treat osteoporosis, asthma, cough, hemorrhoids, and gonorrhoea.
42.	<i>Citrullus vulgaris</i> Thunb.	Curcubitaceae	Dharboosani	Fruit juice is useful in quenching thirst in summer. It is used as an antiseptic in typhus fever. It acts as diuretic.
43.	<i>Citrus acida</i> Roxb	Rutaceae	Elimitchai	The leaves, fruits and fruit juice of this tree are medicinally valuable. The fruit is used for cooking and used regularly it gradually cures mental disorders. Fruits are an appetizer and relieves belching.
44.	<i>Citrus medica</i> L. var. limetta	Rutaceae	Kidarangai	Fruits are used as pickles. The juice is refrigerant and astringent, preserved rind is used as a remedy for dysentery. Fleshy rind is useful in scorpion sting and snake bite.

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45.	<i>Clitoria ternatea</i> L.	Fabaceae	Kakattan	Used to treat indigestion, headache, heaviness in the head and to make calcination.
46.	<i>Coccinia idica</i> L.	Cucurbitaceae	Kovai	Leaves, fruit, stem and tuber of this plant possess medicinal value. The leaves are used as coolant to eyes. Unripened fruit is effective in eczema, cold and diabetes. The tuber is used for leprosy, rheumatism, diabetes and phlegmatic disorders.
47.	<i>Cocos nucifera</i> L.	Aricaceae	Thennai	Tender coconut water is sweet and kernel is edible, it cures burning sensation during urination, dysuria, venereal heat. Ripe coconut is a nutritious food. The milk, squeezed out of coconut is used to consumed regularly it cures intestinal ulcers, eczema.
48.	<i>Coriandrum sativum</i> L.	Apiaceae	Kothamalli	Commonly used in cooking, leaf and seeds are medicinal value. The leaves cure bilious diseases, it reduces the temperature and removes insomnia.
49.	<i>Crossandro undulaefolia</i> L.	Acanthaceae	Ganagambaram	The plant used to Aprodisiac purposes.
50.	<i>Cucumis sativus</i> L.	Curcubitaceae	Vellarikkai	Leaves, fruits and seeds are medicinal use. Tender fruit cures rheumatism, phlegmatic and bilious disorders. Leaves roasted with cumin are powdered and pinch of it cures sore throat and acts as diuretic.
51.	<i>Cucumis trigonus</i> Roxb.	Curcubitaceae	Chukkankai	Leaves, root, fruit possess medicinal properties. Unripened fruit gives relief from rheumatism and acts as an appetizer. Leaves and roots are purgative.
52.	<i>Curcuma longa</i> L.	Zingiberaceae	Turmeric	The rhizome is called turmeric. Oleo resin and oils extracted from this. Powdered turmeric is antiseptic. Paste of turmeric and neem leaf is used externally on the eruptions of small pox, which enhances the healing process.
53.	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Arugampul	Juice of the grass applied to eye cures eye diseases and also applied to bruises/injuries bleeding stops. Infusion of the grass with pepper is an antidote.
54.	<i>Daemia extensa</i> (Jacq.) R.Br.	Asclepidaceae	Uthamani	Decoction of the leaves is given to children as an anthelmintic and also used in treatment of ashtma and snake bite. The plant extract is used for urinary infections, menstrual disorders. Leaf extract is used for ulcer.
55.	<i>Desmodium triangulare</i> (Retz.) Schindl.	Fabaceae	Kaattu thuvurai	Roots and leaves grinded with cow milk taken regularly will cure piles. Juice of the grass applied to eye cures eye diseases. Infusion of the grass with pepper is an antidote.
56.	<i>Datura alba</i> Nees.	Solanaceae	Oomathai	Decoction of the leaves is given to children as an anthelmintic and also in the treatment of asthma and snake bite. The juice of the leaves with ginger is used in rheumatism.
57.	<i>Delonix elata</i> (L.) Gamble	Caesalpinaceae	Vathanarayanan	Leaves roasted in castor oil are used externally to cure abscesses. Decoction of the leaves with castor oil if consumed in empty stomach it helps to clean intestine. It cures rheumatism.
58.	<i>Digitalis lanata</i> Ehrh.	Scrophulariaceae	Naripugaiyelai	Decotion used to treat heart patients.

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59.	<i>Datura stramonium</i> L.	Solanaceae	Vellai oomathai	Leaves used to treat earache and baldness and feeding mother problems.
60.	<i>Eclipta alba</i> L.	Asteraceae	Karizalankani	Plant has many medicinal properties. This is an ideal medicine for jaundice, used as a liver tonic and also to reduce swelling. Root used to strengthen body and also the girths. Effective in the treatment of eye diseases, jaundice, anemia and dropsy.
61.	<i>Ericiba paniculata</i> Roxb.	Convolvulaceae	Onankodi	This is an ideal medicine for gastric disorders. Effective for joint pains and inflammation.
62.	<i>Ervatamia coronaria</i> (L.) Burkill.	Apocynaceae	Nanthiyavattam	The flowers are used in treating all types of eye disorders. Flower juice is used to treat cataract. Root charcoal and the milky juice of the leaves are used in ophthalmia.
63.	<i>Evolvulus alsmoides</i> (L.)	Convolvulaceae	Vishnu Kranthi	Powder of whole plant along with the leaves of <i>wrightia tinctoria</i> , <i>Alstonia scholaris</i> and Euphorbia is used to cure venereal diseases.
64.	<i>Erythrina indica</i> L.	Papilionaceae	Kalyanamurungai	Leaf extract acts as a diuretic, if taken regularly it improves chronic urinary problems and improves fertility in women. The decoction of the powder gives relief in intestinal ulcers.
65.	<i>Eucalyptus globules</i> Labill.	Myrtaceae	Neelakirimaram	Fresh leaves are externally applied as a local application to small wounds. The fluid extract is a strong disinfectant. Large quantity of eucalyptus is used as an aromatic agents in soaps. The volatile oil of eucalyptus is proves to have strong anti-malarial properties.
66.	<i>Eugenia jambolana</i> Lam.	Myrtaceae	Naaval	Barks, leaves and seeds are astringent and exhibit medicinal property. Bark is dried in shadow, powdered and given in goats milk to cure colic, piles and biliousness. Fruit is edible. Powdered seed reduces the blood sugar level in diabetic patients.
67.	<i>Ficus benghalensis</i> L.	Moraceae	Aalamaram	Juice made out its fruit and seeds are useful as external application for pain and bruises, sores and ulcers. Bark has specific properties in reducing blood sugar in diabetes, dysentery and diarrhea.
68.	<i>Ficus religiosa</i> L.	Moraceae	Arasamaram	Important herb in the system of Siddha. The extract of the bark is used as an anthelmintic, seed is used as aphordisic. Dried powder applied on the ulcer of the affected area, gives relief.
69.	<i>Gendarussa vulgaris</i> Nees.	Acanthaceae	Karumnochi	Acute rheumatism, rheumatoid arthritis, paralysis, sinusitis, migrane could be cured along with other ingredients.
70.	<i>Hemidesmus indica</i> (L.) Schult	Asclepiadaceae	Nannari	Root is aromatic. Dried root exhibit tonic action and it is diuretic also. Decoction of the root along with milk is given in treating stone in bladder and dysuria and also treating indigestion, dyspepsia, anorexia, fever, skin diseases, ulcers, rigidity of joints and gleet.
71.	<i>Hibiscus cannabinus</i> L.	Malvaceae	Pulichakeerai	Young shoots and leaves are refrigerant for body and gives digestive power and also used to treat intestinal ulcers. Cardiac problems, high blood pressure. The juice of the flower added with the pepper and sugar will act as appetizer.

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72.	<i>Lantana camera</i> L.	Verbenaceae	Unnichedi	Decoction and inhalation of leaf and root bark along with the leaves of <i>Psidium guajava</i> , <i>Adhatoda vasica</i> and <i>Eucalyptus globulus</i> is taken to get relief from cold and fever.
73.	<i>Leucas aspera</i> (Willd) Spreng	Lamiaceae	Thumbi	Flowers are used as stimulant, expectorant and laxative. Juice of the leaves gives relief from head-ache, phlegmatic disorders and rheumatism. Leaves are made into paste if given acts as an antidote, insecticide, cold, scabies, scorpion sting and snake.
74.	<i>Impatiens balsamina</i> L.	Balsaminaceae	Kaasithumbi	The extract of the whole plant is used in medicinal preparations. The extract of the flower is used as a healing agent for burns.
75.	<i>Jatropha gossypifolia</i> L.	Euphorbiaceae	Kattamanaku	Seeds yield a pale yellow oil which is used as purgative refrigerant. Externally it is an ideal cleaning application for wounds sores and ulcers.
76..	<i>Melia dubia</i> Hiern, Noncav.	Meliaceae	Malaivembu	The leaves, flower, bark and gum are used as medicine it used to eradicated the intestinal worms and also it cures stomach pain during menorrhoea. Powdered root bark act as an anthelmintic.
77.	<i>Mentha arvensis</i> L.	Lamiaceae	Pudhina	Oil extracted from this plant is aromatic and in confectionaries.
78.	<i>Merremia hastata</i> Hall.	Convolvulaceae	Paaran-Kodi	Powder of leaf stem and root is taken with the powder of stem bark of <i>Acacia nilotied</i> , leaves of <i>Alstonia scholaris</i> , <i>Citrus media</i> and <i>Euphorbia hirta</i> . The powder is used as tooth powder to cure tooth diseases.
79.	<i>Mimosa pudica</i> L.	Mimosaceae	Thottalsurungi	Decoction of the root gives relief in calcareous deposits and in other gravelly complaints. The juice of the leaves and roots are used as an external application for piles, fistule, boils and brusies.
80.	<i>Nerium oleander</i> L.	Apocynaceae	Aarali	Root is used externally, made into paste with water or oil and applied to haemorrhoids in cancers and ulcerations. Decoction of the leaves is applied externally to reduce the swellings.
81.	<i>Ocimum basilicum</i> L.	Lamiaceae	Kodithulasi	Decoction from leaves, stem, inflorescence and root along with leaves of <i>Evolvulus alsinoides</i> , <i>Solanum surattense</i> and <i>Solanum trilobatum</i> is taken internally to get relief from cold, cough and fever.
82.	<i>Ocimum canum</i> Sims	Lamiaceae	Naai thulasi	Decoction of leaf is taken with the leaves of beetle for the removal of chest cold.
83.	<i>Ocimum sanctum</i> L.	Lamiaceae	Thulasi	Leaves used for skin diseases, hepatic disorders and as an antidote snake bite and scorpion sting and antibacterial activities.
84.	<i>Phyllanthus amarus</i> Schum.and Thenn	Euphorbiaceae	Keezhanelli	This is an ideal medicinal plant to cure jaundice. For cobra bite, the leaf of this plant along with pepper of equal quantity with luke warm water, it works as an antidote.
85.	<i>Phyllanthus niruri</i> L.	Euphorbiaceae	Sivappu-Keezhanelli	Its plant extract used to cure jaundice and stomach pains.
86.	<i>Phyllanthus virgatus</i> G.Forster	Euphorbiaceae	Kutthu Keelanelli	Paste of leaf is taken along with the leaves of <i>Ricinus communis</i> , <i>Centella asiatica</i> and <i>Calamus rotang</i> to cure jaundice and stomach ache.
87.	<i>Polygala chinensis</i> L.	Polygalaceae	Seriyangi	An infusion of the leaves is prescribed for asthma, chronic bronchitis and catarrhal infections. The root is used for fever and dizziness. The leaves are used as an antidote to poison.

Table 1 : Contd.....

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88.	<i>Polygala elongate</i> Klein Ex. Willd	Polygalaceae	Peyriyanangi	Leaf is purgatives and used in making different types of calcinations. The juice of the leaves cures bilious diseases and act as laxative and also used as an antidote for insect bites.
89.	<i>Ricinus communis</i> L.	Euphorbiaceae	Amanaku	Castor oil is used as a refrigerant. Oil is laxative very effective in colic pains, ulcer and also in the treatment of irritation of eye, nose, ear and mouth. Root is very effective in veneral inflammation. It cures muscular rheumatism, paralysis, asthma and cough
90.	<i>Solanum nigrum</i> L.	Solanaceae	Manathakkali	The leaves given strengthens the inner oragans, it acts as refrigerant, when the body has excess of heat. Leaves if taken cures stomatitis, burns and intestinal ulcers and also cures inflammation of liver and spleen. Dried fruits cure arthritis.
91.	<i>Solanum trilobatum</i> L.	Solanaceae	Thoodhualai	Whole plant parts are used for asthma, chronic febrile affections and difficult partuition. The root and leaves are bitter and astringent. The leaves are roasted along the onion in gingelly oil is used to treat difficulty in breathing.
92.	<i>Strychnos nux-vomica</i> L.	Loganiaceae	Etti	The root bark extract is an ideal medicine for cholera and dysentery. Seeds produce a sort of intoxication. The seeds are used instead of coffee seeds by burning it along with rice husk. The decoction of the bark is used to cure the psychic patients.
93.	<i>Swertia chirata</i> Buch. – Ham Ex. Wall	Gentianaceae	Nilavembu	Entire plant used for stomachic febrifuge and anthelmintic.
94.	<i>Thespesia populnea</i> (L.) Sol. Ex. Correa	Malvaceae	Poovarasani	The barks, leaves, flowers, and fruits are useful in cutaneous affection such as scabies, psoriasis, ringworm, guinea worm, and eczema.
95.	<i>Tridax procumbens</i> L.	Asteraceae	Kinathupoondi	Paste of leaf along with the leaves of <i>Cocculus hirsutus</i> , <i>Scilla indica</i> and castor oil is applied externally to get relief from swellings.
96.	<i>Trigonella foenum graceum</i>	Fabaceae	Venthayam	Leaves and roots are used to cures asthma, eczema, indigestion, eye problems, stomach ache and back pain.
97.	<i>Urena lobata</i> L.	Malvaceae	Kodi thuthi	Decoction of root and leaves of <i>Adhatoda vasica</i> , <i>Alangium salvifolium</i> and <i>Coccinia grandis</i> is taken orally to cure snake bite.
98.	<i>Vernonia cinerea</i> Less	Asteraceae	Mookkuthi poondi	Powder from the whole plant along with the leaves of <i>Crataeva adansonii</i> and <i>punica granatum</i> is heated with castor, gingelly and coconut oils and applied externally on breast to cure tumor in breast.
99.	<i>Vinca rosea</i> L	Apocynaceae	Nithiyakalyani	Leaves, roots and flowers are used to treat many diseases mainly excess urination, excess thirstyness. Powdered root if consumed one teaspoon every day it may help in controlling diabetes and urinary disorders and also useful in treating leukaemia.
100.	<i>Vitex negundo</i> L.	Verbenaceae	Notchi	Leaves used to relieve the head ache. The paste of the leaves used as an external application for liver disorders. The oil extracted from leaves used to cure the swelling of the neck. The roots and leaves are made into paste with rice water is used externally on wounds and ulcers.

one is the medicinal practices. These practices and knowledge treasures are transferred to these generations from their forefathers. Of the scheduled tribes in the study area, Bagatas, Konda Doras and Valmikis are found to possess reasonable sound ethnomedicinal knowledge than other tribal communities.

Pharmaceutical researchers acknowledge that screening plants on the basis of information derived from traditional knowledge saves billion dollars in time and resources. However, the traditional knowledge has been eroding in these tribal societies of Notchimalai village. The crucial factors responsible for such erosion are the pressure of modernization and migration of youth from tribal area to semi urban or urban areas to take up job and employment. If such things are continue to happen in these communities then knowledge related to ethnobotany will vanish from the region. Similar factors were believed to be the reason for the loss of traditional ethnobotanical knowledge in Iban community in Sarawak, Malaysia (Jarvie and Perumal, 1994) and Raji tribal community of Central Himalaya, India (Negi *et al.*, 2002).

The collection, identification and documentation of ethnomedicinal data on biological resources are inevitable steps for bioprospecting. These plants may serve as source of some important medicine against some major diseases. Therefore, these tribal claims should be further validated scientifically.

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